UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,928	01/09/2006	Christoph Herrmann	DE030245	3779

24737   7590   09/10/2010
PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER
ANWAR, MOHAMMAD S

ART UNIT	PAPER NUMBER
2463	

MAIL DATE	DELIVERY MODE
09/10/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _19 July 2010_.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
     closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-21_ is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-21_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a) ☐ All   b) ☐ Some * c) ☐ None of:
       1. ☐ Certified copies of the priority documents have been received.
       2. ☐ Certified copies of the priority documents have been received in Application No. _____.
       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 7/19/10 have been fully considered but they are not

persuasive. Please see response below:

In response to applicant argument, Claim 1, as amended herein, recites, *inter*

alia, as follows: "...the missing data packet being (i) **retransmitted without** a delay (ii)

retransmitted with a delay or iii) disregarded for retransmission." (emphasis

added). Kuchibhotla fails to disclose and/or suggest at least "...the missing data packet

being (i) retransmitted without a delay, (ii) retransmitted with a delay or (iii) disregarded

for retransmission," as recited in amended independent Claim 1. At page 5 of the

present Office Action, the Examiner stated that Kuchibhotla fails to mention "wherein the

REV confirmation message informs the transmitter that a gap exists in a memory of the

receiver due to a missing data packet transmitted consecutively before the most

recently transmitted data packet." The Examiner relied on Dudley to cure such

deficiencies. However, Dudley does not teach and/or suggest the additional feature of

independent Claim 1. As understood by Applicants, Dudley refers to an error recovery

system and method for use in a data communication system in which a sender station

transmits information packets with sequentially numbered information to a receiver

station. The system includes selective retransmission of information packets which have

had errors in transmission based on the order of transmission of information packets

independent of the sequential (sequence) number of the information packets. A list,

such as a linked list having a beginning and an end, is provided and, at the time of

transmission of information packets, an identification of the transmitted information

packet is placed at the end of the list. (see newly cited reference Kim et al.).

Claim Rejections - 35 USC § 103

1.	The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.	The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.	Determining the scope and contents of the prior art.
2.	Ascertaining the differences between the prior art and the claims at issue.
3.	Resolving the level of ordinary skill in the pertinent art.
4.	Considering objective evidence present in the application indicating obviousness or nonobviousness.

3.	This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

4.   Claims 1-2, 5-16, 19-21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kuchibhotla et al. (U.S. Patent No. 7,414,989) in view of Dudley et al.

(U.S. Patent No. 5,754,754) and Kim et al. (U.S. PGPub. No. 2003/0043764 A1).

For claims 1, 8,10, 11 and 12, Kuchibhotla et al. disclose method of

transmitting data packets from a transmitter to a receiver (see column 7 lines 41-52),

wherein an indicator is sent along with each data packet of the data packets (see

column 10 lines 46-47, a new data indicator NDI); wherein the indicator indicates

whether the respective data packet is a new data packet (see column 14 lines 1-2,

where NDI bit indicates it is a new data) or a re-sent data packet (see column 13 lines

60-61, where NDI bit indicates it is previous or resent data); wherein, when the receiver

receives a first data packet with an error, the receiver sends a negative confirmation

(NACK) message to the transmitter (see column 5 lines 30-32, where a NACK is sent);

and wherein, if the receiver subsequently decodes an error-free second data packet that

was sent along with the indicator indicating that the second data packet is a new data

packet, the receiver sends a revert (REV) confirmation message that acknowledges

receipt of the second data packet and requests the transmitter to re-send the first data

packet (see column 14 lines 27-30 where an NDE indication of 0 and 1 with the

acknowledgement scheme can ask the transmitter to resend or not send the previous

data), wherein the REV confirmation message is transmitted by the receiver consequent

on receiving the most recently transmitted data packet (see column 13 lines 57-59).

Kuchibhotla et al. disclose all the subject matter but fails to mention wherein the REV

confirmation message informs the transmitter that a gap exists in a memory of the

receiver due to a missing data packet transmitted consecutively before the most

recently transmitted data packet. However, Dudley et al. from a similar field of endeavor

disclose wherein the REV confirmation message informs the transmitter that a gap

exists in a memory of the receiver due to a missing data packet transmitted

consecutively before the second data packet (column 10 lines 37-4, a status packet or

rev confirmation message with gaps), the missing data packet being retransmitted

without a delay (see column 3 lines 31-33). Thus, it would have been obvious to one

ordinary skill in the art at the time of invention was made to include Dudley et al. gap

scheme into Kuchibhotla et al. ack/nack scheme. The method can be implemented in a

packet. The motivation of doing this is to promptly notify the sender station of an error

(see column 3 lines 24-26). Kuchibhotla et al. and Dudley et al. disclose all the subject

matter but fails to mention retransmitted with a delay or disregarded for retransmission.

However, Kim et al. from a similar field of endeavor disclose retransmitted with a delay

(see para. 99) or disregarded for retransmission (see para. 41). Thus, it would have

been obvious to one ordinary skill in the art at the time of invention was made to include

Kim et al. transmission scheme into Kuchibhotla et al. and Dudley transmission scheme.

The method can be implemented in a node. The motivation of doing this is to delay or

discard retransmission packets as required.

    For claim 2, Kuchibhotla et al. disclose wherein, when the receiver receives

an error-free data packet, the receiver sends a third an acknowledgement

confirmation (ACK) message to the transmitter (see column 16 lines 25-26)

For claim 5, Kuchibhotla et al. disclose wherein the transmitter ignores the revert confirmation message and sends a new third data packet (see column 14 lines 56-57).

For claim 6, Kuchibhotla et al. disclose wherein the indicator has a length of 1 bit (see column 14 lines 1-2 indicates 1 bit either 0 or 1).

For claims 7 and 9, Kuchibhotla et al. disclose wherein the method is an extension of the HARQ protocol in UMTS, and wherein the indicator is sent via the high speed control channel of UMTS (see column 9 lines 39-49, column 4 lines 22-24).

For claim 13, Kuchibhotla et al. disclose sending a negative (NACK) confirmation message from a receiver indicating to the transmitter that an immediately preceding data packet is to be resent (see column 3 lines 34-37), and sending a revert (REV) confirmation message from the receiver if a subsequently received data packet includes an indicator that this received data packet is not a retransmission in response to the negative confirmation message, wherein revert confirmation message is transmitted by the receiver consequent on receiving the subsequently received data packet, wherein the revert confirmation message indicates to the transmitter that the received data packet has been received without error, and that the immediately preceding data packet before the received data packet is to be resent (see column 14 lines 27-30 and column 15 lines 50-54 where it is clearly explained as to acknowledgement and negative acknowledgement messages using NDE bit to indicate if the previous message was received properly or not). Kuchibhotla et al. disclose all the subject matter but fails to mention wherein the REV confirmation message informs the transmitter that a gap exists in a memory of the receiver due to

missing data packet transmitted consecutively before the second data packet. However, Dudley et al. from a similar field of endeavor disclose wherein the REV confirmation message informs the transmitter that a gap exists in a memory of the receiver due to missing data packet transmitted consecutively before the received data packet (see column 10 lines 37-44, a status packet or rev confirmation message with gaps), the missing data packet being retransmitted without a delay (see column 3 lines 31-33). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Dudley et al. gap scheme into Kuchibhotla et al. ack/nack scheme. The method can be implemented in a packet. The motivation of doing this is to promptly notify the sender station of an error (see column 3 lines 24-26). Kuchibhotla et al. and Dudley et al. disclose all the subject matter but fails to mention retransmitted with a delay or disregarded for retransmission. However, Kim et al. from a similar field of endeavor disclose retransmitted with a delay (see para. 99) or disregarded for retransmission (see para. 41). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Kim et al. transmission scheme into Kuchibhotla et al. and Dudley transmission scheme. The method can be implemented in a node. The motivation of doing this is to delay or discard retransmission packets as required.

For claim 14, Kuchibhotla et al. disclose wherein the indicator indicates whether the received data packet is a newly transmitted data packet. (see column 14 lines 1-2).

For claim 15, Kuchibhotla et al. disclose including receiving another data packet at the receiver and sending an affirmative (ACK) confirmation message from the

receiver if an error is not detected in the another data packet (see column 14 lines 27-30, column 15 lines 39-40 where NDE bit of 1 indicates that the previous data was received properly).

For claim 16, Kuchibhotla et al. disclose transmitting a data packet of a series of data packets from a transmitter to a receiver (see Figure 8 where a series of packets are sent), receiving a revert (REV) confirmation message from the receiver indicating that the data packet has been received satisfactorily at the receiver and that an immediately prior data packet in the series of data packets is to be retransmitted, wherein the REV confirmation message is transmitted by the receiver consequent on receiving the satisfactorily received data packet (see column 14 lines 27-30 where NDE bit of 0 would indicate that the previous data was not received properly), and selectively transmitting the immediately prior data packet (see column 16 lines 56-57). Kuchibhotla et al. disclose all the subject matter but fails to mention wherein the REV confirmation message informs the transmitter that a gap exists in a memory of the receiver due to missing data packet transmitted consecutively before the satisfactorily received data packet. However, Dudley et al. from a similar field of endeavor disclose wherein the REV confirmation message informs the transmitter that a gap exists in a memory of the receiver due to missing data packet transmitted consecutively before the satisfactorily received data packet (see column 10 lines 37-44, a status packet or rev confirmation message with gaps); the missing data packet being retransmitted without delay (see column 3 lines 31-33). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Dudley et al. gap scheme into Kuchibhotla

et al. ack/nack scheme. The method can be implemented in a packet. The motivation of

doing this is to promptly notify the sender station of an error (see column 3 lines 24-26).

Kuchibhotla et al. and Dudley et al. disclose all the subject matter but fails to mention

retransmitted with a delay or disregarded for retransmission. However, Kim et al. from a

similar field of endeavor disclose retransmitted with a delay (see para. 99) or

disregarded for retransmission (see para. 41). Thus, it would have been obvious to one

ordinary skill in the art at the time of invention was made to include Kim et al.

transmission scheme into Kuchibhotla et al. and Dudley transmission scheme. The

method can be implemented in a node. The motivation of doing this is to delay or

discard retransmission packets as required.

For claims 19 and 20, Kuchibhotla et al. disclose including receiving an

affirmative (ACK) confirmation message and transmitting a next data packet of the

series of data packets in response to the affirmative confirmation message, including

receiving a negative (NACK) confirmation message and retransmitting the next data

packet in response to the negative confirmation message 9see column 3 lines 34-37).

For claim 21, Kuchibhotla et al. disclose at least one transmitter and at least one

receiver, wherein each transmitter and receiver is configured to execute a protocol that

includes three confirmation message types: an affirmative confirmation (ACK) that

signals to the transmitter that a most recently transmitted data packet has been

received satisfactorily at the receiver (see column 14 lines 7-8); a negative confirmation

(NACK) that signals to the transmitter that the most recently transmitted data packet has

not been received satisfactorily at the receiver (see column 14 lines 2-3); and a revert

confirmation (REV) that signals to the transmitter that the most recently transmitted data

packet has been received and that an immediately prior transmitted data packet has not

been received satisfactorily at the receiver (see column 14 lines 27-40, using

ACK/NACK with NDE bit as revert message to indicate if the previous data was

received properly or not); wherein the REV confirmation message is transmitted by the

receiver consequent on receiving the most recently transmitted data packet (see column

13 lines 57-59). Kuchibhotla et al. disclose all the subject matter but fails to mention

wherein the REV confirmation message informs the transmitter that a gap exists in a

memory of the receiver due to missing data packet transmitted consecutively before the

most recently transmitted data packet. However, Dudley et al. from a similar field of

endeavor disclose wherein the REV confirmation message informs the transmitter that a

gap exists in a memory of the receiver due to missing data packet transmitted

consecutively before the most recently transmitted data packet (column 10 lines 37-4, a

status packet or rev confirmation message with gaps); the missing data packet being

retransmitted without a delay (see column 3 lines 31-33). Thus, it would have been

obvious to one ordinary skill in the art at the time of invention was made to include

Dudley et al. gap scheme into Kuchibhotla et al. ack/nack scheme. The method can be

implemented in a packet. The motivation of doing this is to promptly notify the sender

station of an error (see column 3 lines 24-26). Kuchibhotla et al. and Dudley et al.

disclose all the subject matter but fails to mention retransmitted with a delay or

disregarded for retransmission. However, Kim et al. from a similar field of endeavor

disclose retransmitted with a delay (see para. 99) or disregarded for retransmission (see

para. 41). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Kim et al. transmission scheme into Kuchibhotla et al. and Dudley transmission scheme. The method can be implemented in a node. The motivation of doing this is to delay or discard retransmission packets as required.

5.   Claims 3 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuchibhotla et al. in view of Dudley et al. and Kim et al. as applied to claims 1 and 16 above, and further in view of Ulug (Patent No. 4,312,065).

For claims 3 and 18, Kuchibhotla et al., Dudley et al. and Kim et al. disclose all the subject matter but fails to mention wherein a third data packet without data is sent in response to the revert confirmation message. However, Ulug from a similar field of endeavor discloses wherein a third data packet without data is sent in response to the revert confirmation message (see column 17 lines 43-46). Thus, it would have been obvious to one ordinary skill in the art at the time of invention was made to include Ulug null packet scheme into Kuchibhotla et al., Dudley et al. and Kim et al. packet transmission scheme. The method can be implemented in a packet transmitter. The motivation of doing this is to control transmission of data packets.

6.   Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuchibhotla et al. in view of Dudley et al. and Kim et al. as applied to claim 1 above, and further in view of Dottling et al. (background U.S. Patent No. 7,249,303).

For claim 4, Kuchibhotla et al., Dudley et al. and Kim et al. disclose all the

subject matter but fails to mention wherein the third data packet is sent in response to

the revert confirmation message with one of a part of the data with one of a part of the

data originally included in the first data packet and all of data originally included in the

first data packet. However, Dottling et al. from a similar field of endeavor disclose

wherein the third data packet is sent in response to the revert confirmation message

with one of a part of the data with one of a part of the data originally

included in the first data packet and all of data originally included in the

first data packet (see column 1 lines 39-47). Thus it, would have been obvious to

one ordinary skill in the art at the time invention was made to include Dottling et al.

combination of data in a packet scheme into Kuchibhotla et al., Dudley et al. and Kim et

al. packet transmission scheme. The method can be implemented in the packet

transmission and receiving unit. The motivation of doing this is to reduce the bandwidth.

7.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Kuchibhotla et al. in view Dudley et al. and Kim et al. as applied to claim 16 above, and

further in view of Kohno (U.S. PGPub. No. 2003/0120802).

For claim 17, Kuchibhotla et al., Dudley et al. and Kim et al. disclose all the

subject matter but fails to mention including selecting to transmit the immediately prior

data packet based on a count of prior retransmissions of the immediately prior data

packet. However, Kohno from a similar field of endeavor disclose selecting to transmit

the immediately prior data packet based on a count of prior retransmissions of the

immediately prior data packet (see paragraph 98 lines 1-9, paragraph 111 lines 9-12,

reference explains number of counts option). Thus, it would have been obvious to one

ordinary skill in the art at the time of invention was made to include Kohno count

scheme into Kuchibhotla et al., Dudley et al. and Kim et al. transmission scheme. The

method can be implemented in a packet. The motivation of doing this is to reduce the

risk of buffer overflow (see paragraph 113 lines 7-11).

Conclusion

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to MOHAMMAD ANWAR whose telephone number is

(571)270-5641. The examiner can normally be reached on Monday-Thursday, 9am-
4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Derrick W. Ferris can be reached on 571-272-3123. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MOHAMMAD ANWAR
Examiner
Art Unit 2463

/M. A./
Examiner, Art Unit 2463

/Derrick W Ferris/
Supervisory Patent Examiner, Art Unit 2463